

**Notice of Allowability**

Application No.

10/738,448

Applicant(s)

WILSON, AMELA KREHO

Examiner

John H. Le

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/05/2006.
2. ☒ The allowed claim(s) is/are 1,2,4-12,14-18,20-26 and 28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

**EXAMINER'S AMENDMENT**

***Response to Amendment***

1. Applicant's amendment filed 06/05/2006 has been entered and carefully considered.

Claims 1, 4, 6, 14, 17, 20, and 22 have been amended.

Claims 3, 13, 19, and 27 have been cancelled.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Brian W. Peterman on July 7, 2006.

The applicant has been amended as follows:

In Claims:

1. (Currently Amended) A method for identifying signal sources, comprising:
  - determining phase differential data for an input signal stream, the input signal stream corresponding to signal data from a single signal source of unknown identity;
  - applying wavelet packet processing to the phase differential data to generate a wavelet-based signature for the input signal stream;
  - accessing a database having stored data including ~~of~~ wavelet-based signatures corresponding to known signal sources, known signal sources being signal sources that have been previously identified; and

comparing the signature for the input signal stream with the stored data to determine if the signature for the input signal stream matches wavelet-based signatures stored for known signal sources; ~~and~~  
identifying the input signal stream as a known signal source based upon the determination if a match is made; and  
outputting an indication of the identity of the signal source of the input signal stream.

17. (Currently Amended) A signal source identification system, comprising:

a phase pre-processing sub-system coupled to receive an individual input signal stream, the phase pre-processing sub-system being configured to determine phase differential data for the individual input signal stream, the input signal stream corresponding to signal data from a signal source of unknown identity;

a wavelet-based signal processing sub-system coupled to receive the phase differential data from the phase pre-processing sub-system, the wavelet-based signal processing sub-system being configured to apply wavelet packet processing to generate a signature for the individual input signal stream;

a database having stored data, the stored data including wavelet-based signatures corresponding to known signal sources, known signal sources being signal sources that have been previously identified; and

a signal source identification sub-system coupled to receive the signature from the wavelet-based signal processing sub-system, the signal source identification sub-system being configured to compare the signature for the input signal stream with the stored data and to determine if the individual input signal stream matches wavelet-based signatures of a known signal source in order to identify the input signal stream as being from a known signal source if a match is determined to be made, the signal source identification sub-system being further configured to output an indication of the identity of the signal source of the input signal stream.

***Reasons for Allowance***

3. Claims 1-2, 4-12, 14-18, 20-26, and 28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Please see the previous office action and applicant's argument filed on 06/05/2006 and 11/02/2005.

Regarding claim 1, none of the prior art of record teaches or suggests the combination of a method for identifying signal sources, wherein the method comprising: determining phase differential data for an input signal stream, the input signal stream corresponding to signal data from a single signal source of unknown identity; applying wavelet packet processing to the phase differential data to generate a wavelet-based signature for the input signal stream; accessing a database having stored data including of wavelet-based signatures corresponding to known signal sources, known signal sources being signal sources that have been previously identified; and comparing the signature for the input signal stream with the stored data to determine if the signature for the input signal stream matches wavelet-based signatures stored for known signal sources; and identifying the input signal stream as a known signal source based upon the determination if a match is made. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 17, none of the prior art of record teaches or suggests the combination of a signal source identification system, comprising: a phase pre-processing sub-system coupled to receive an individual input signal stream, the phase pre-processing sub-system being configured to determine phase differential data for the

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individual input signal stream, the input signal stream corresponding to signal data from a signal source of unknown identity; a database having stored data, the stored data including wavelet-based signatures corresponding to known signal sources, known signal sources being signal sources that have been previously identified; and a signal source identification sub-system coupled to receive the signature from the wavelet-based signal processing sub-system, the signal source identification sub-system being configured to compare the signature for the input signal stream with the stored data and to determine if the individual input signal stream matches wavelet-based signatures of a known signal source in order to identify the input signal stream as being from a known signal source if a match is determined to be made. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is 571 272 2275. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John H. Le

Patent Examiner-Group 2863

July 7, 2006

**BRYAN BUI**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Bryan Bui', with a stylized, flowing script.